AMENDMENTS TO THE CLAIMS

Claims 1-30 (Cancelled)

31. (Currently Amended) A system comprising:

a bus;

a first host system coupled to the bus to control a first plurality of ~~peripherals~~ peripheral devices via the bus, the first host system serving as one or more of an active host system and a standby host system; ~~and~~

a second host system coupled to the bus and the first host system, the second host system to control a second plurality of ~~peripherals~~ peripheral devices via the bus, the second host system serving as one or more of the active host system and the standby host system, the first and second host systems are synchronized via an Ethernet link such that either of the first and second host systems is ready for immediate takeover of a plurality of peripheral devices coupled to a failed host system if either of the first and second host systems fails, wherein the first and second host systems are further to contribute resources being utilized by the first and second peripheral devices, wherein the first host system and the second host system each include a controller[[,]]; and

the controller having a fault detection module, the controller coupled to ~~coupled with~~ fault detection hardware, the fault detection module to receive a notification from the fault detection hardware indicating a fault ~~of~~ associated with either the first host system or the second host system,

wherein when the fault occurs, ~~the~~ the failed host system ~~that failed suspends~~ to suspend control of and ~~disconnects~~ disconnect from the bus, and ~~the~~ an active host system ~~that is still active takes~~ to immediately takeover control of the plurality of peripheral devices coupled to the ~~host that failed~~ failed host system.

32. (Currently Amended) The system of claim 31, wherein the controller further comprises:

an interface to provide the controller with access to the first plurality of peripheral devices and the second plurality of ~~applications~~ peripheral devices ~~being executed on~~ coupled to the first host system and the second host system, respectively;

a control module having a Peripheral Component Interconnect (PCI)-to-PCI (P2P) control module;

a power and reset control module; and

a clock control module to provide clock signals to the bus.

33. (Previously Presented) The system of claim 31, wherein the bus comprises a COMPACTPCI bus.

34. (Currently Amended) The system of claim 31 to use a Redundant System Slot (RSS) architecture, and the controller comprises a RSS controller.

35. (Previously Presented) The system of claim 32, wherein the first host system and the second host system each include a plurality communication modules, ~~and an~~

~~Ethernet link coupled with~~ wherein the plurality of communication modules are coupled to the Ethernet link to maintain synchronization between the first host system and the second host system.

36. (Currently Amended) The system of claim 31, wherein the first host system and the second host system each include a host control (HC) interface unit, wherein the HC interface unit ~~that is~~ to:

receive control signals transmitted during startup and fail-over; and

respond to control signals transmitted during startup and fail-over.

37. (Currently Amended) A method comprising:

controlling a first plurality of ~~peripherals on~~ peripheral devices coupled to a first host system via a bus, the first host system serving as one or more of an active host system and a standby host system;

controlling a second plurality of ~~peripherals on~~ peripheral device coupled to a second host system via the bus, the second host system coupled with the first host system, the second host system serving as one or more of the active host system and the standby host system, the first and second host systems are synchronized via an Ethernet link such that either of the first and second host systems is ready for immediate takeover of a plurality of peripheral devices coupled to a failed host system if either of the first and second host systems fails, wherein the first and second host systems are further to contribute resources being utilized by the first and second peripheral devices,; and

receiving a notification at a fault detect module residing at a controller coupled with fault hardware, the notification is received from the fault hardware indicating a fault of either the first host system or the second host system, wherein when the fault occurs, the failed host system ~~that failed suspends~~ to suspend control of and ~~disconnects~~ disconnect from the bus, and ~~the~~ an active host system ~~that is still active takes control~~ to immediately takeover of the plurality of peripheral devices coupled to the ~~host that failed~~ failed host system.

38. (Currently Amended) The method of claim 37, further comprising:

accessing the first plurality of peripheral devices and the second plurality of ~~peripherals being executed on~~ peripheral devices coupled to the first host system and the second host system, respectively; and

providing clock signals to the bus.

39. (Previously Presented) The method of claim 37, wherein the bus comprises a COMPACTPCI bus.

40. (Previously Presented) The method of claim 38, further comprising maintaining synchronization between the first host system and the second host system via an Ethernet link.

41. (Previously Presented) The method of claim 37, further comprising:

receiving control signals to be used during startup and fail-over; and

responding to the control signals received during startup and fail-over.

Claims 42–49 (Cancelled)